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Maritime Spatial Planning as Evolving Policy in Europe: Attitudes, Challenges, and Trends

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Abstract

Maritime Spatial Planning (hereinafter mentioned as MSP) is developing and growing rapidly and constantly worldwide. It is acknowledged as a key instrument to balance sectoral interests and achieve sustainable use of marine resources with the ecosystem-based approach as the underpinning principle (EC, 2010). Nevertheless, there are different planning approaches and different levels of implementation of maritime/marine spatial planning (MSP) processes in the world. Among the plans implemented in Europe, and based on the planning processes developed, different aims for MSP can be noted which translate into either strategic, fully integrated, forward-looking and participative planning or "spatial optimisation" elements. On the other hand there are areas where MSP is in an immature phase and where mutual learning, improved governance or capacity building is needed, or areas where a strategic approach to facilitate coordination of MSP arrangements would be necessary. This paper addresses current MSP attitudes, challenges and future trends and discusses the MSP planning and management conceptual approaches, options and styles, mainly as defined through the European regulatory framework.

Keywords: Maritime spatial planning; Strategic planning; ecosystem-based management; marine governance; land-sea interaction

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1. Introduction

Maritime or Marine[1] Spatial Planning (MSP) has experienced an intense and dynamic growth on the international scale in recent years, and several practices have emerged from different continents and countries. In the EU, the legal provisions requiring Member States to engage in the preparation of maritime spatial plans (Directive 2014/89/EU) are currently is the very heart of the process of legal transposition into respective national laws. This ought to be concluded before 18 September 2016, and plans passed by 31 March 2021. Marine spatial planning initiatives are expanding rapidly (UNEP & GEF-STAP, 2014; Ehler, 2014; Qiu and Jones, 2013) including those by developing countries and institutions such as IOC-UNESCO, FAO and UNEP.

Maritime spatial planning is currently acquiring the same legal status as terrestrial spatial planning and is also clearly linked to the management of coastal zones (ICZM). Almost all international organizations have taken initiatives with regard to the management of coastal zones in general and particularly to ICZM, including the European Union (Council of Europe) that after a long process with rather heterogeneous results, started in 1973, has ended up with the recent adoption of Directive 2014/89/EU on Maritime Spatial Planning (Gissi and Suarez de Vivero, 2016). The land-sea interaction is besides emphasized by the EU Territorial Agenda that clearly states:

> "*Maritime activities are essential for the territorial cohesion in Europe… The Marine Strategy Framework Directive and the EU Integrated Maritime Policy call for coordinated actions by the Member States for the successful implementation of the MSP. This planning should be integrated into the existing national spatial planning systems in order to achieve a harmonious and sustainable development of the regions that include both marine and land areas (land-sea continuum)".*

It is, therefore, evident that the development of maritime/marine spatial planning is a longstanding process constructed over time and is mostly characterized by conceptual complexity – from sustainable development to ecosystem-based management– and by a greater territorial dimension as well. Current marine spatial planning is covering also areas under national jurisdiction (including the Exclusive Economic Zone and the continental shelf beyond 200 nautical miles), although there has also been growing international interest in the so-called marine "Areas Beyond National Jurisdiction"(ABNJ). The development of MSP initiatives worldwide has to respond to the increased complexity of coastal-marine planning by taking into account

i. the transdisciplinarity of the approach adopted from the very beginning of this process, and
ii. the successive environmental-based (ecosystem-based management) and economics-based (blue growth) focuses that dominate the present approach to marine planning (especially in the EU with the MSP Directive). At the same time, territorial planning techniques, from zoning to the extensive kit of planning, management and implementation tools need to be developed in maritime space which is a critical issue of the emerging generation of plans.

[1] The term "marine spatial planning" was initially used internationally in both academic literature and technical documents. Inside the European Union, however, the expression "maritime spatial planning" began to be used in official documents, thus focusing on the **economic growth related conceptualization of the term** and serving to the distribution of competences between the different DGs. Nowadays, the term "maritime spatial planning" against the initial one that stressed on environmental-based planning.

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In any case, maritime spatial planning is developing and growing rapidly and constantly on a national level, worldwide. Besides, several efforts are being made aiming to the coordination of national policies on the regional sea basins, for instance the North and the Baltic Sea, the Adriatic-Ionian macro-region[2], the western Mediterranean[3] etc. Maritime spatial planning is also evolving in the arctic seas. The conception and implementation of plans, although originally developed in high-income countries in Western Europe, North America and Australia, is rapidly evolving nowadays in middle and low income regions, such as China, Vietnam, Indonesia, South Africa, the Caribbean and the Coral Triangle which is the global center of marine biodiversity, aiming to achieve economic and environmental benefits. Consequently, this paper attempts to present and analyze:

i. the landscape of MSP policies;
ii. the different conceptual approaches as reflected through the Marine Strategy framework Directive (MSFD) and the Integrated Maritime Policy (IMP), respectively;
iii. the different MSP related types and styles of planning. Convergences, divergences, prospects, challenges and current policy trends are being identified and commented with a focus on conceptual and governance issues.

2. MSP as Evolving and Ongoing Policy

Historically, maritime/marine spatial planning was understood as the strategic placement of human activities at the sea so as to achieve the regulation, management and protection of the marine environment in such a way as to mitigate, if not to minimize conflicts and negative effects on the marine ecosystem and to increase synergies. The described process can be achieved through widely acceptable spatial plans resulting from regular consultation among stakeholders ensuring their active involvement in planning, throughout the whole implementation period and ideally from the beginning of the process (Ehler and Douvere, 2007). In recent years, MSP is gaining increasing importance as a new planning and management procedure for an integrated, ecosystem-based management of marine areas, which are partially considered as a continuation of the land.

Within the framework of EU programs, a set of criteria and tools regarding MSP has started to be treated and tend to gain popularity among applicants' preferences. Furthermore, the actions related to the MSP differ in terms of intensity, the extent of their involvement in the ecosystem, their duration and other parameters. In particular in the EU, the MSP now receives a significant boost by its Directives, its policies and its regulations that is a set of political incentives that could be categorized into four main areas: a) environmental law b) legislation regarding renewable energy sources and systems (RES) c) the regulatory framework for fisheries and d) the framework for cross-sectoral and integrated management (Qiu and Jones, 2013). Most of them, although they do not explicitly foresee the cross-sectoral MSP, directly and significantly affect the distribution of the marine space (in one or more sectoral activities) thus limiting its availability. Therefore, synergies and pressures occur between sectoral policies, consisting, however, in parallel opportunities and challenges for the development of integrated, cross-sectoral initiatives.

Summing up, we could say that the political landscape for MSP in the EU is characterized by a series of sectoral policies and guidelines, which are both synergies and pressures together claiming the

[2] For more information please check the ADRIPLAN (ADRiatic Ionian maritime spatial PLANning) project, a cross-border project funded by the European Commission - DG Maritime Affairs and Fisheries (DG MARE).
[3] See the WEST MED initiative : http://www.westmed-initiative.eu

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'edge' between the different policy axes. In continuity to the objectives set by the Marine Strategy Framework Directive (MSFD) and the Integrated Maritime Policy (IMP), maritime spatial planning should be able to:

i. formulate and implement the ecosystem-based approach ;
ii. clearly and undoubtedly ensure the future of investments in maritime sectoral activities;
iii. prevent or reduce conflicts between different uses of marine space through integrated planning.

This operation is quite ambitious, given that the management of maritime activities in Europe took place mainly on a sectoral basis (Lloyd et al., 2011) and that some conflicts cannot be predicted over time. Besides that, it is clear that the MSP has now become a popular European issue and although continuously ongoing we can confirm that transnational cooperation is encouraged in the framework of exchange of information, data, expertise, joint planning and joint actions that promote sustainability of the European marine waters and blue growth effects in European regions.

3. National MSP Reality in Europe

When referring to national regulations and initiatives, we will try to briefly describe, the evolution of MSP implementation in Europe. The presentation is mainly based on data available by IOC-UNESCO[4]. While all EU member states must implement maritime spatial plans by 2021[5], according to the MSP Directive, several ones, besides the maritime potential and relevant conflicts, do not envisage MSP yet. For instance, Bulgaria and Romania have just started making first initial steps with transboundary planning at regional level with one another. Croatia has not compiled a national plan yet.[6] Similarly in Cyprus, in the absence of national MSP plans, a pilot plan for the District of Limassol was completed in 2015 (Hadjimitsis et al., 2016). In Slovenia maritime planning has been practiced only on a sectoral basis.[7] Denmark has not completed an MSP plan yet. However, sectoral plans exist for energy, fisheries, infrastructure, environmental protection and other uses and the Danish Parliament has adopted the Act on Maritime Spatial Planning. Estonia is at the moment running more sectoral policies (cf. National Thematic Plan for Estonian Marine Waters or Maritime Spatial Plan of Estonia) than an integrated MSP plan. A Legal authority was set for MSP under the Estonian Planning Act of 2015. Likewise, Finland has, since October 2016, a Legal authority for MSP. MSP is underway in the territorial sea, initiated by municipalities and regional councils. Ireland has completed a strategic marine plan that was setting goals and enabling actions in 2012. However, there are no MSP activities completed at national or regional level even though “Enablers Task Force” report has been completed in 2014, thus creating beliefs that MSP is underway. France, besides its long tradition in spatial planning has not developed any MSP activities at national level yet. Likewise, Greece that at the moment has just a few sectoral plans, mainly related to RES, MPAs and European projects related initiatives, it has not made any

[4] The following is a compilation of IOC’s relevant overview regarding MSP cf. http://msp.ioc-unesco.org/world-applications/overview/

[5] Precisely, according to Article 15 (transposition) of the Directive, Member States should bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 18 September 2016, while they must establish maritime spatial plans at the latest by 31 March 2021.

[6] However, the Zadar county has implemented an Integrated Sea Use Management Plan that is a legally-binding plan focusing on mariculture.

[7] Slovenia previewed that the MSP Directive would be implemented in the framework of existing spatial planning legislation.

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significant progress for MSP at national level. Nevertheless, the country has already entered a preparation phase concerning national MSP policy with a draft law on MSP and several stakeholders' engagement related activities. In Italy there are a few regional initiatives set up, particularly under European projects. There is no MSP plan at national level ongoing or in place yet, but pilot MSP activities are taking place (i.e. with ADRIPLAN that is the European Adriatic-Ionian maritime spatial planning project). Malta has only approved a strategic plan in 2015, which is not considered as a marine spatial plan (a rough zoning map is though included).

Latvia has made a step forward by completing its first draft of a national MSP plan in 2016 (expected to be approved in 2017) and Lithuania, has adopted a new spatial planning legislation in 2011 and has completed, in parallel, a Pilot MSP Plan for its EEZ through the BaltSeaPlan project. Besides a non-negligible progress, Poland does not have a binding MSP plan in place yet. The country adopted in 2013 a regulation on maritime spatial planning in Polish sea areas. While non-binding pilot MSP projects were being completed under BaltSeaPlan, e.g., the Gulf of Gdansk, Middle Bank, and Pomeranian Bight, a national MSP was launched in 2016. Portugal has undertaken several actions regarding MSP, including its National Ocean Strategy (2013-2020) that was published in 2014, the Plano de Ordenamento do Espaço Marítimo (POEM), a study (2008-2010) setting out the economic, environmental and social importance of Portugal's continental sea area that was completed in 2014 and a fundamental law on MSP implemented in 2015, but not an MSP plan yet. There are no existing marine plans, but MSP is underway in Spain, where a Royal Decree is being prepared for the transposition of the EU MSP Directive into Spanish legislation.

On the other hand, several European countries have made determined efforts to deal with MSP successfully. Belgium is one of the countries with a quite significant history in MSP, besides the relatively small size of its maritime area. The first non-binding "Master Plan" (zoning) for the Belgian Part of the North Sea (EEZ) was completed and implemented in 2003, while the innovative GAUFRE project was completed by the University of Gent in 2005. The Marine Environment Act of 1999 was amended in 2012 in order to include development of MSP and a new Maritime Spatial Plan was approved in March 2014. Germany may be considered as among the most active European countries regarding MSP. An overall development concept for the seas and a strategy for an integrated German maritime policy were published by the Federal government in 2011. Federal marine spatial plans were approved for the Baltic and the North Seas EEZ in 2009, while Lander (State)-level plans have already been approved. In Iceland, MSP is underway through Skipulagsstofnun, the Icelandic National Planning Agency, since 2013. Besides that, MSP is also supported by the National Planning Strategy (2015-2026). The Netherlands envisaging a Maritime Spatial Plan for the North Sea completed their EEZ Spatial Plan in 2005. This plan was revised and incorporated in National Water Plan in 2009 and 2014, while a North Sea 2050 Spatial Agenda was published in 2015. Norway, the country with the biggest coastline in Europe, has put in place three initiatives namely the "Integrated Ocean Management Plan for Barents Sea, for the Norwegian Sea and for the North Sea, approved in 2006 (and revised in 2010) in 2009 and in 2013 respectively. Sweden has put in action national MSP legislation in 2014. A new institution, the Swedish Agency for Marine and Water Management was created in 2011 to undertake MSP. Three marine spatial plans will be produced by municipal-level governments for the Gulf of Bothnia, the Baltic Sea, and Skagerrak/Kattegat, covering the entire EEZ. Finally, the role of United Kingdom may be considered as quite challenging since it has to coordinate the national and other relevant authorities of all four countries and is doing a quite good job indeed.

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4. MSP Conceptual Approaches

It seems that the Marine Strategy framework Directive (MSFD) and the Integrated Maritime Policy (IMP) are oriented in two different approaches for the MSP in Europe. The MSFD provides an approach based on the ecosystem, aiming to achieve "good environmental status" (GES) and requires to operate alongside different sectoral activities, in such a way so as to achieve this goal. It can be interpreted as based on the **"hard sustainability"** concept, where the maintenance of ecosystems is considered as the foundation of the ecosystem-based approach. MSP is likely to be used as a prevention strategy for maintaining the health of ecosystems, particularly in countries that do not have large maritime industries. The Integrated Maritime Policy (IMP) on the contrary, in addition to the ecosystem-based approach, is a framework that provides the MSP as a mean of cross-sectoral management and detection of future investments' opportunities. The IMP can be interpreted as being based on the **"soft sustainability"** concept, through which the MSP is more likely to grow as a complete system for the balance of different sectors' needs, ensuring in parallel that rapid development in certain maritime sectors will not lead to adverse consequences in other sectors. The IMP often considers the preservation of the ecosystem as a kind of "sectoral" use of the marine space. Such an approach of the MSP is more likely to prevail in countries with large maritime industries (oil-gas, renewable energy, aggregates, etc.), where there is a lot of competition in claiming the restricted maritime space among the different sectors. The eventual **tensions between the MSFD and the IMP** are partially due to the fact that these are the responsibility of different Commission services, since while **DG Environment** supervises the implementation of the MSFD, the implementation of the IMP and the policy regarding the fisheries policy are under the responsibility of the **Directorate General of Maritime Affairs and Fisheries of the European Commission (DG MARE)**. The MSP initiatives drawn up by the two Directorates seem to diverge, leading to confusion about the strategic direction of MSP in Europe. Additionally, as the two Directorates consult different advisory bodies, there is criticism about inevitable obstacles that are being created to the flow of information and joint decision-making (De Santo, 2010). The potentially conflicting approaches of the MSP (IMP and MSFD), combined with the lack of sufficient cooperation between the two main EU bodies responsible for the management of the marine environment, are likely to constitute the main constraints to the development of a more coherent MSP policy in Europe. There is also the risk of **the transposition of these potentially conflicting approaches on a national level**. (Kyvelou, 2016)

Among the 35 **projects that were studied**[8], based on UNESCO data[9], it came out that:

i. regarding the **study area**, there is no particular pattern besides each country's scope, to whether MSP is applied to its EEZ, territorial sea or municipal waters, a transnational

[8] Data refer to key elements of MSP for the following countries and/or sub-regions : Abu Dhabi, Australia (bioregions and Great Barrier Reef), Belgium, Canada (Beaufort Sea, Eastern Scotian Shelf Integrated Management Plan and Marine Plan Partnership for the Canadian Pacific North Coast), China, Denmark, Germany (Lower Saxony (Niedersachsen) LÄNDER, Mecklenburg-Vorpommern LÄNDER, Schleswig-Holstein LÄNDER and North/Baltic Seas), Iceland, Israel, Mexico (Central Southern Pacific Ocean, Gulf of California, Gulf of Mexico and Caribbean Sea and Northern Pacific), New Zealand (HAURAKI GULF), Norway (Barents sea and Lofoten, North Sea, Norwegian Sea), Poland, South Africa, Sweden, The Netherlands, United Kingdom (England and Scotland), USA (Massachusetts, Mid-Atlantic Region, Northeast Atlantic Region, Rhode Island, State of Oregon Territorial Sea Plan and Washington).

[9] Cf. the website of IOC – UNESCO regarding MSP. The Intergovernmental Oceanographic Commission of UNESCO has been instrumental in implementing the concept of ecosystem-based management through its MSP approach. It promotes, among others, development of management procedures and policies leading to the sustainability of marine environments, as well as the capacity-building necessary for maintenance of healthy ocean ecosystems.

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region or a more restrictive area. In general, it seems that countries that treat **all waters under their jurisdiction tend to increase**, a fact that lead us believe that they now foresee more an ecosystem-based approach, while firstly more restrictive areas were being studied and planned probably in favor of particular interests. Besides that, it is quite promising that **several other countries work on their maritime plans**. The already included in this research as completed ones cover in total an area of 14000750-14500000 km^2. According to Ehler (Ehler, 2017), in a sample of about 40 plans, the spatial coverage of MSP plans on 2016 is mainly the EEZs (200nm) with a percentage of 53%, followed by territorial seas (12nm or less) that represent the 38%, while municipal waters cover the remaining 10%.

ii. As for the **driving forces of MSP**, perceived conflicts among human uses (26%) seems to be the prevailing factor, followed by new and emerging uses of the marine area, e.g., wind energy, aquaculture (23%) and the need for a more integrated approach (20%). Perceived conflicts between uses and nature conservation, e.g., marine protected areas and marine conservation or biodiversity concerns seem to influence MSP evenly (19%), while climate change effects, economic growth and public sector's issues regarding MSP's management, decision-making and policies improvement and transparency follow with 17%, 14% and 8% accordingly. It should be noted that percentages and main drivers may be slightly different according to the studied MSP plans, however human uses related conflicts, remain to the top, followed by marine conservation concerns, the need for a more integrated approach and new and emerging uses, while climate change effects and economic growth concerns remain at the end as less represented (cf. Ehler, 2017).

iii. Significant differences were also observed a/ regarding **the time** previewed for the completion of the plan[10], b/ the time frame previewed for their review[11], as well as c/ their **legal status** that was mainly either regulatory or had an executive character (64%) and to a smaller percentage served an advisory / strategic role (30%) (cf. **Figure 1**).

[10] A 2-4 years' period was needed for the completion of most plans.
[11] Most of them are scheduled to be reviewed within a period varying from 3 to more than 5 years' period.

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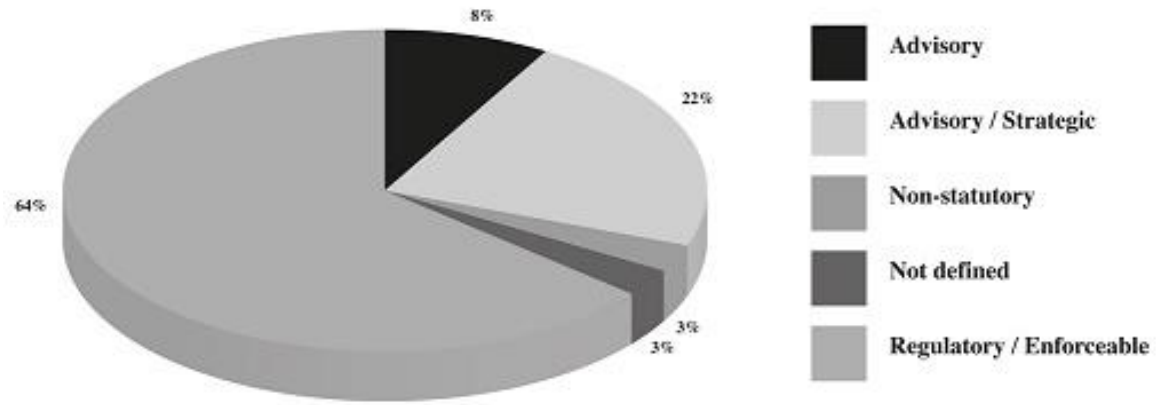

Figure 1.

Regarding sectors representation (cf. **Figure 2**), plans include all sectors to a percentage of 17% (of which 14% include fishing, 1% excluding fisheries management measures and the remaining 2% is referred to "all major sectors including fishing"). Renewable energy (8%), followed by marine transport, marine conservation, oil and gas extraction (6%) appear to be the most popular uses, while commercial fisheries, military activities, tourism, recreation and mineral mining/aggregate extraction are slight below since they are included in 5% of the plans. Coastal land uses (4%), aquaculture, ports and recreational fishing (3%), pipelines and cables, artisanal fishing and fisheries (2%), interests of local populations, protected areas and forestry, environment, economic development, sand extraction for coastal defense, sand and gravel mining, Underwater Cultural Heritage, restoration and protected areas (navigation and fishing not included) are also included (1% each).

It is quite promising that most plans followed planning participatory procedures (91% of the plans previewed participatory procedures – 51% throughout the MSP process, 20% extensive, 3% mainly with stakeholders, 14% rational stakeholders' participation the 3% of which through a forum and only in the remain 9% they were limited). It seems that the involvement of stakeholders in the conception helps ensure transparency and balance between the conflicting interests. Instead, it is rather unfortunate that the majority have not provided as reference or suggestion, the consideration of the coastal management. Weak relation to coastal management is observed to the 31% of the studied plans, medium connection to the 23% of them, while it is not specified in 11% of them and there is no coastal management program to connect to, in 9% of the plans. Apparently, only to the remaining 26% of the plans, it is obvious that land and sea planning should be coordinated.

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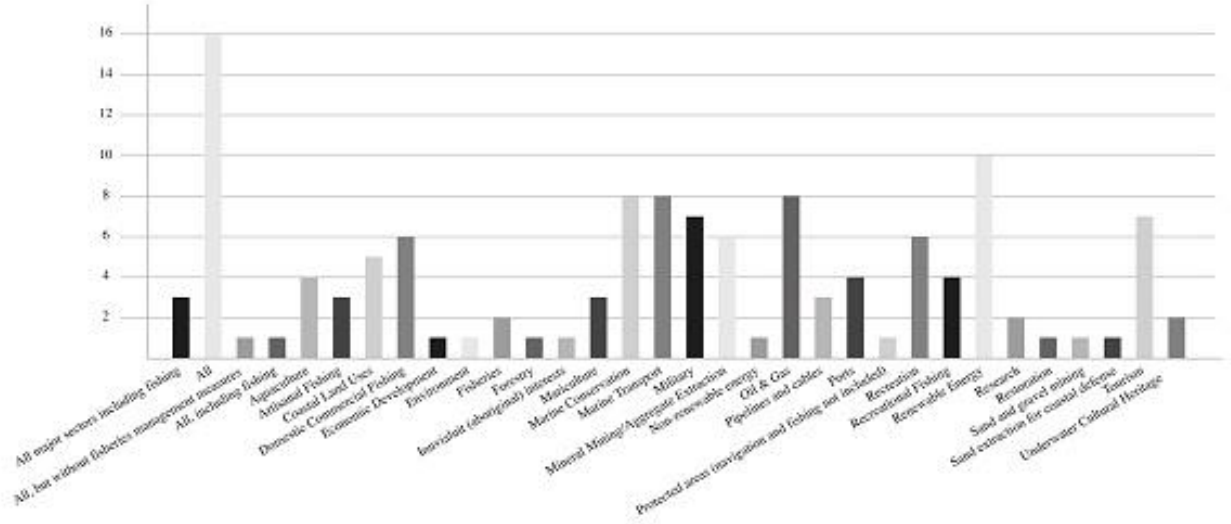

Figure 2.

What is triggering for the development and implementation of such plans can be summarized to:

i. the requirement of better management of space and time in medium and long term due to increased interest and many conflicting interests involved;
ii. the need to protect the environment, and
iii. the need for optimum allocation of space between the existing and the future maritime activities.

5. Opportunities and Challenges within the MSP Framework

MSP should be envisaged as part of a wider planning and management process, considering land-sea interactions' potential, cooperation among authorities responsible for planning, enacting and implementing, sectoral and cross-sectoral policies and conflicting interests. In addition to that, achieving consistency between terrestrial and maritime planning (including coastal zones) is an additional challenge to overcome (Commission of the European Communities, 2008), mainly because several terrestrial land-uses or planning orientations, i.e. agriculture and urban growth are relevant in the context of MSP as additional conflicts (in particular for coastal zones and vice versa). This is why terrestrial and maritime spatial planning should be coordinated in parallel. The respective services should cooperate and stakeholders could be involved in order to ensure coherence. Nevertheless, this later suggestion, of achieving coherence among land-sea plans, may be considered as adding complexity that is as another non negligible obstacle to overcome in addition to the already existing conflicts of terrestrial or maritime planning. Furthermore, "incorporating the future in MSP" (Ehler, 2017) as in all planning activities is one of the most challenging actions of MSP, requiring answers on "where and how we want to go there" (from an ecosystem-based approach to a more sectoral policy, envisaging hard or soft sustainability). In addition to MSP orientation and/or scenario's selection, the question of monitoring and evaluating of MSP plans is also a quite tricky task, wavering between efficiency / success and ineffectiveness /

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diseconomies. Another crucial issue for MSP would be how to raise awareness and mainly cooperation for planning in the transnational level. Considering that national MSP would affect the situation of neighbouring jurisdictions (Ehler, 2017), MSP should be managed and preferably conceived at a transboundary level. Apparently, the authorization of setting a service responsible for MSP, meaning dealing alone or in collaboration with other services with the MSP's relevant legislation, monitoring, design, implementation, evaluation and review of plans as well as organizing and updating relevant data is another challenge that MSP needs to overcome in order to reassure its effectiveness. It has been observed that the fragmentation of responsibilities among different services multiplied by the divergences of different consultants, interests and incomparable datasets is quite possible to lead to endless efforts and unsuccessful actions. On the contrary, a well-defined supervising authority managing all MSP processes could manage the relevant procedures effectively.

6. MSP Related Styles of Planning

It is important for every MSP process to choose the appropriate type of planning to be carried out. Different aims for MSP can be noted among those plans implemented in Europe and the planning processes developed can be characterized either as governed by "spatial optimization and risk minimization" elements or as strategic, fully integrated, forward-looking planning approaches. In Europe, most of the existing plans encompass both elements, although the weight given to each element may vary from one case to the other. Differences are also noted with respect to the degree of land-sea integration, with some plans incorporating land and sea territory (e.g. in the case of the German Länders) and others exclusively focusing on sea areas (either EEZ or from the high water mark).

As far as the "spatial optimization and risk minimization approach" is concerned, the maritime plan's main aim is to facilitate a rational arrangement of key maritime sectors. This type of planning responds to sectorial calls for space; its role is to act as an independent administrator of marine space. Planning decisions are driven by input provided by sectors, leading to an approach that may set aside areas for certain uses but does not inherently question the socio-economic impact of uses, for example. Although this type of planning can be forward-looking in the sense that it grants priority to future uses (e.g. allocating priority areas for offshore wind energy farms), it is not a strategic approach to planning in the sense of comprehensive sectorial integration, nor does it tend to be participatory in the sense of jointly developing a common vision for the sea or taking into account scenarios of possible future developments. No socio-economic evidence is needed, for example, to justify priorities of one sea use over another, as the main issue is the ideal spatial arrangement of uses. In this instance, the MSP process is understood as focusing on key activities and arranging other uses around these rather than as taking decisions on the mix and allocation of uses.

The other type of planning could be described as a fully integrated, forward-looking one, where the planning process is participative, involves multiple sectors and is, consequently, of a more strategic nature, i.e. designed to achieve integrated economic, social and ecological objectives. This type of planning is often guided by strategic objectives for the sea and not only driven by sectorial policy goals, although these do play a role. In this kind of planning, a part of the decision-making is delegated to the licensing process. There are certainly other forms of planning in between these two extremes.

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7. Concluding Remarks

As seen from the above analysis, some countries, like Germany, have extended their legislation on spatial planning, and thus their ability for MSP to their EEZ, with usual incentive the development of a sectoral policy, such as the offshore wind energy sector or underwater mining, while others proceeded to the implementation of new maritime legislation and maritime planning systems, independent of the national terrestrial planning system (United Kingdom, Scotland, Sweden..) with provision of new administrative structures and simplified procedures (mainly on licensing) (cf. Belgium, Scotland etc.). The designation of marine protected areas (NATURA 2000 network) usually comes in the second phase, as for example in Belgium or France. In parallel, some Member States and some European countries have developed integrated maritime management plans, which provide guidance for decision making regarding a specified marine area. In other cases we observe selective planning of specific maritime areas (France, Norway) based on the growth potential and the vulnerability of the marine environment. More generally, in several cases the "adaptive management" is being selected, underlining the importance of scientific knowledge acquisition for the environment in question. It seems that there are no generalized solutions and that each managed area requires a customized and specialized design approach.

In the South of Europe and the wider Mediterranean space, we observe mobility from the side of Regions (Italy, Spain) and countries (Croatia, Slovenia) for the implementation of integrated management strategies for coastal zones (ICZM) in conjunction with the MSP and parallel state initiatives, as for example in Spain, aiming at the zoning of territorial waters in order to promote offshore wind energy. Greece has been quite delayed regarding the organization of a governmental strategy on this issue, without however missing initiatives, focusing on cross-border maritime spatial planning or jointly with other Member States, mainly in the framework of the Adriatic-Ionian macro-region but of the Aegean Sea as well. Furthermore, besides the common interests of certain countries in the relevant sea basins and relevant funding opportunities, very few transboundary MSP examples exist in practice, although the EU is encouraging a regional, transboundary approach among its member states and all its sea basins (Ehler, 2017). It seems that European projects and relevant transnational cooperation are mostly limited to the exchange of information related to MSP meaning the development of data or tools that lead to the elaboration of the relevant data's quantity, quality or representation (i.e. GIS tools) that may help the conception of a marine plan but do not consist MSP applications. However, no matter how weak the relation of EU funded projects may be with MSP, their role should not be neglected.

In conclusion we could testify that the MSP is now recognized as a key political tool both for the implementation of development goals related to the sea and oceans and the sustainability and ecosystem management approaches.

However, the key challenge across Europe remains how the MSP will translate its principles into concrete practices. (Calado et al. 2010). An adaptive, ecosystem-based and integrated approach for the management of human activities on coastal and marine areas seem to be the best path that could be followed by the MSP as part of the shift of interest from the jurisdictional importance to the «patrimonialization» of the seas and the ocean, which is besides consistent with the concept of «territorial capital» (OECD, 2001, Kyvelou, 2010). The territorial capital is defined as the system of territorial assets of economic, cultural, social and environmental nature that ensures the development potential of places. In an economic perspective, the territorial capital is regarded as a distinct bundle of factors attracting investments and making the return of certain investments higher than in other regions. Could we possibly initiate, in this context, a new concept of «maritime capital» on which a place-based approach for the development of blue businesses/activities could be articulated (Kyvelou, 2016)? This

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place-based approach in MSP based on the identification and analysis of a region's specific «maritime capital» can keep up with the strategic, forward-looking style of planning, taking into account the planning time frame and the future trends, long-term perspectives, scenarios and projections, so as the MSP be an organic part of the Blue Growth strategy on regional, national, macro-regional (sea basins) and European levels.

Certainly a key concept is also the adaptive management that is necessary so as to ensure the ecosystems' sustainability, and thus the adequacy and sustainability of MSP in long-term, through a mechanism that will allow responsible bodies to review, redesign and reconsider planning and management options along time. Regarding the issue of planning of the marine system based on the principles of "hard" or respectively "soft" sustainability, there are real differences and risks. However, although the ecosystem-based management (hard sustainability) is more "preventive", focusing on achieving / maintaining ecosystems in good environmental status, there is no certainty that it will be more effective against an integrated MSP (soft sustainability) to the achievement of maritime sustainable management. Eventually, everything will depend on how the marine planning and management processes will take place as well as on how the limits of the marine ecosystem will be calculated and evaluated, as part of this process (Kyvelou, 2016).

8. Epilogue : Key Policies to Boost Coordinated MSP Worldwide

Recently, the Directorate General for Maritime Affairs and Fisheries of the European Commission, (DG MARE) and the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO), elaborated a Joint Roadmap that defines priority areas and strategic objectives for mutual cooperation. This important step follows their commitment to support the implementation of both the universally agreed Agenda 2030 for Sustainable Development - and in particular the SDG 14 both within the EU and at the international level- and the Strategic Plan for Biodiversity 2011-2020. The 2017 Roadmap set several priority areas: a/ Transboundary maritime/marine spatial planning b/ Blue economy c/ Ecosystem-based maritime/marine spatial planning d/ Capacity building and e/ Building Mutual understanding and communicating MSP. Furthermore, the demand for specific training in the preparation and implementation of marine planning has therefore already shown itself to be quite significant on a global scale (Gissi and Suarez de Vivero, 2016). It is evident that many challenges arise from the transdisciplinary nature of MSP which is a key emerging aspect, as well as in relation to the elaboration of a MSP 'theory' that could be shaped based on the enforceability of maritime spatial plans.

Furthrmore, designing effective education and training in MSP, with regard to the possible identification of MSP as a distinct scientific discipline and probably the professional certification of a MSP planner, despite the prevailing view that MSP is a team work, becomes, nowadays, a necessity. This is a crucial point that can prove to be a key factor of MSP progress and success mainly in countries lagging behind. IOC-UNESCO and DGMARE were recently[12] engaged to identify specific training needs via a global survey that will be implemented as a first step of this activity with a view to tailor MSP training to regional needs.

[12] Namely during the 2nd International Conference on MSP that was held in Paris on the 17-19 of March 2017 and the resulting joint roadmap.

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References

Calado H., K. Ng, D. Johnson, L. Sousa, M. Phillips, F. Alves, Marine spatial planning: lessons learned from the Portuguese debate, Marine Policy. 34 (2010) 1341–9.

Commission of the European Communities, Green Paper, Towards a Future Maritime Policy for the Union: A European Vision for the Oceans and Seas, Brussels, 2006.

Commission of the European Communities, Communication from the Commission - Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU, Brussels, 2008 /*COM/2008/0791final*/(http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52008DC0791) (Accessed 20.02.2017).

De Santo E., Whose science? Precaution and power-play in European marine environmental decision-making Marine Policy. 34 (2010) 414–420.

Douvere F., Ch. Ehler, Marine Spatial Planning - the need for a common language, 2011. (http://www.coastalwiki.org/wiki/Marine_Spatial_Planning_-_the_need_for_a_common_language) (Accessed 18.05.2016).

EC, Progress Report on the EU's Integrated Maritime Policy, SEC(2009) 1343, Brussels, 2010.

Ehler Ch., A guide to evaluating marine spatial plans, 70, ICAM Dossier 8, UNESCO, IOC Manuals and Guides, Paris, 2014.

Ehler Ch., Douvere F., Visions for a sea change. Report of the first international workshop on marine spatial planning. Intergovernmental oceanographic commission and man and the biosphere programme. IOC manual and guides no. 48, UNESCO, Paris, 2007.

Ehler Ch., Conclusions: Benefits, lessons learned, and future challenges of marine spatial planning, Marine Policy. 32 (2008) 840 – 843.

Ehler Ch., "World-wide Status and Trends of Maritime/Marine Spatial Planning" presented at the 2nd International Conference on Marine/Maritime Spatial Planning, UNESCO, Paris, 2017.

European Commission, UNESCO, IOC, Joint Roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide (MSP), 2nd International Conference on Marine/Maritime Spatial Planning, UNESCO, Paris, 2017.

Gissi E., J.L. Suarez de Vivero, Exploring marine spatial planning education: Challenges in structuring transdisciplinarity, Marine Policy. 74, (2016) 43-57.

Hadjimitsis, D., Agapiou, A., Themistocleous, K., Ch. Mettas, E. Evagorou, G. Soulis, Z. Xagoraris, M. Pilikou, K. Aliouris, N. Ioannou (2016). Maritime Spatial Planning in Cyprus. Open Geosciences, 8(1) (2016) pp. 653-661. Jay S. Planners to the rescue: spatial planning facilitating the development of offshore wind energy, Marine Pollution Bulletin. 60 (2010) 493–499.

Juda L. The European Union and the Marine Strategy Framework Directive: continuing the development of European ocean use management, Ocean Development and International Law. 41, (2010) 34–54.

Kyvelou S. (ed.), Maritime spatial issues: maritime dimension of territorial cohesion, maritime spatial planning, sustainable blue growth, ed.KRITIKI, Athens, 2016 (in Greek).

Kyvelou S., From spatial planning to territorial management: the concepts of strategic spatial planning and territorial cohesion in Europe, ed. KRITIKI, Athens, 2010 (in Greek)

Lloyd M.G., H.D. Smith, R.C. Ballinger, T.A. Stojanovic, R.W. Duck, E.U. Maritime policy and economic development of the European seas, in: S. Kidd, A. Plater, C. Frid (eds), The ecosystem approach to marine planning and management, Earthscan, London, Washington DC, 2011. p. 68–91.

OECD Territorial Outlook 2001 Edition, 292 pages, OECD, Paris 2001

Qiu W., P. Jones, The emerging policy landscape for marine spatial planning in Europe, Marine Policy. 39 (2013) 182-190.

UNEP & GEF-STAP,"Marine Spatial Planning in Practice – Transitioning from Planning to Implementation. An analysis of global Marine Spatial Planning experiences". Thomas, H. L., Olsen, S., & Vestergaard, O. (Eds), UNEP Nairobi, 2014.

UNESCO Intergovernmental Oceanographic Commission, Marine Spatial Planning. http://www.unesco-ioc-marinesp.be/ marine_spatial_planning_msp, 2017 (accessed 12.08.15 and 12.02.17).

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